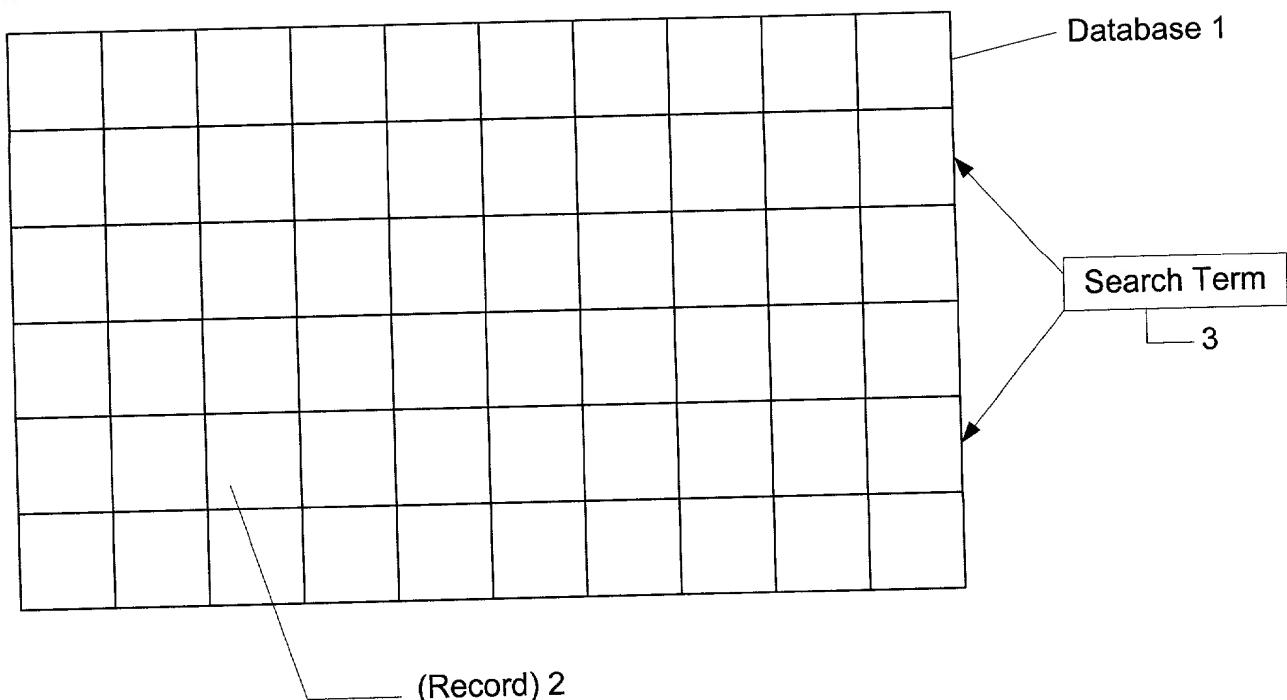
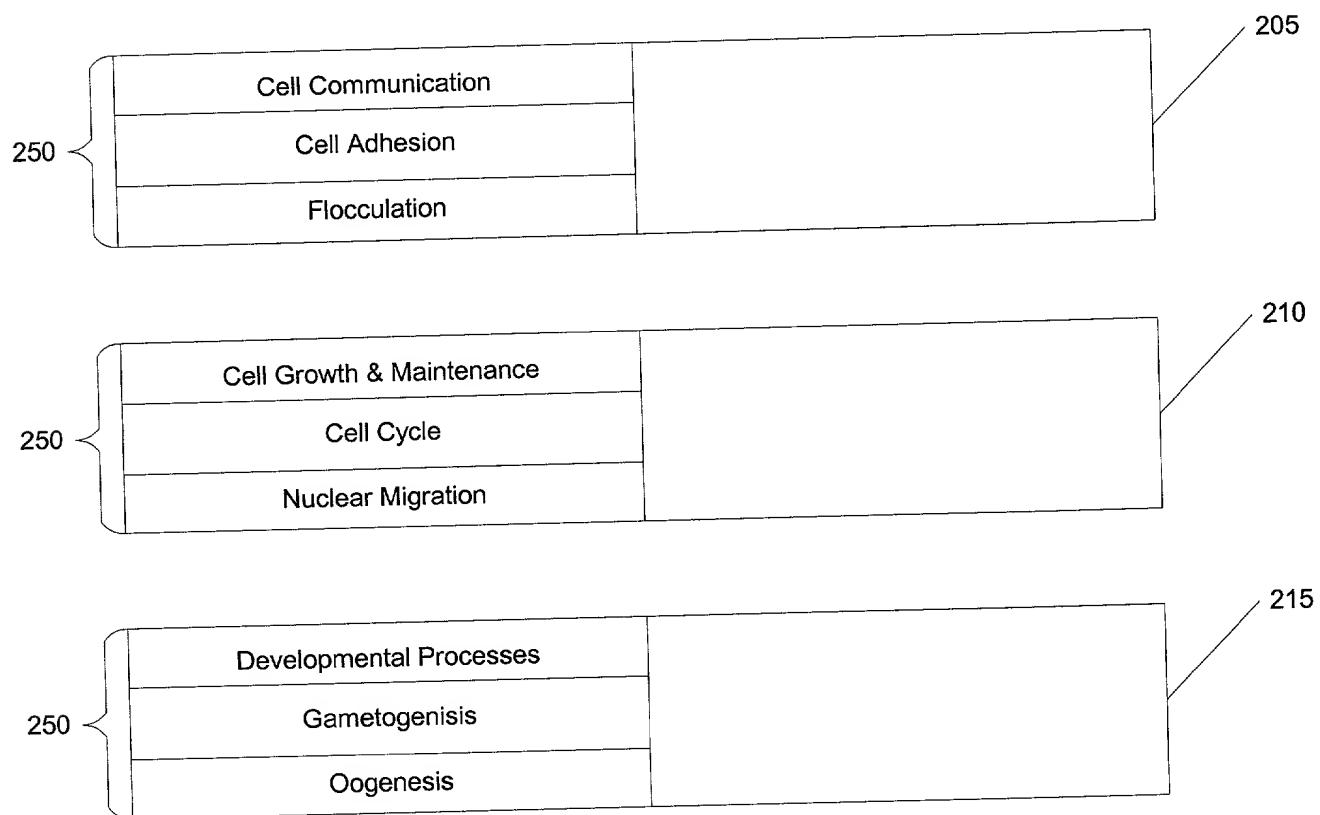


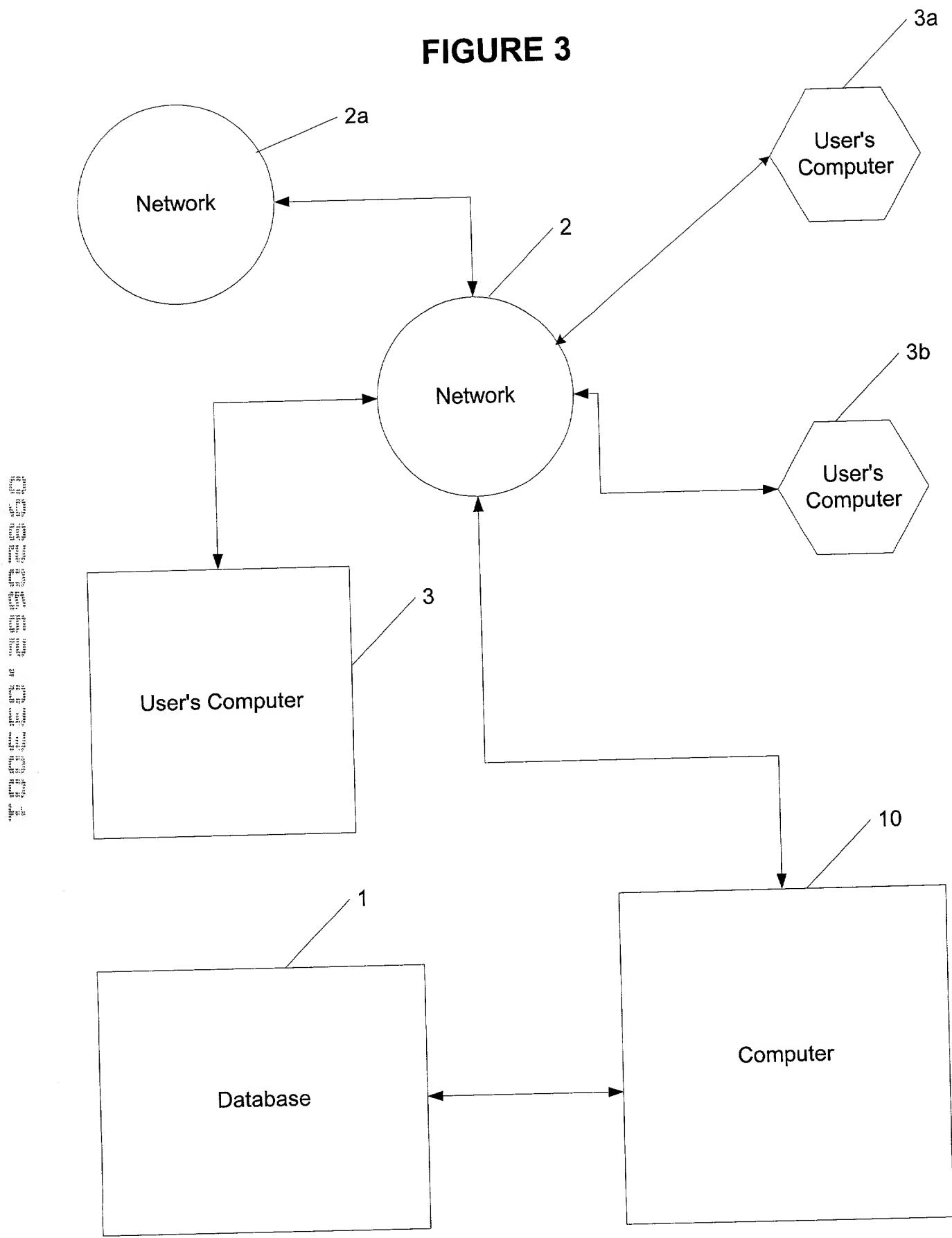
## FIGURE 1



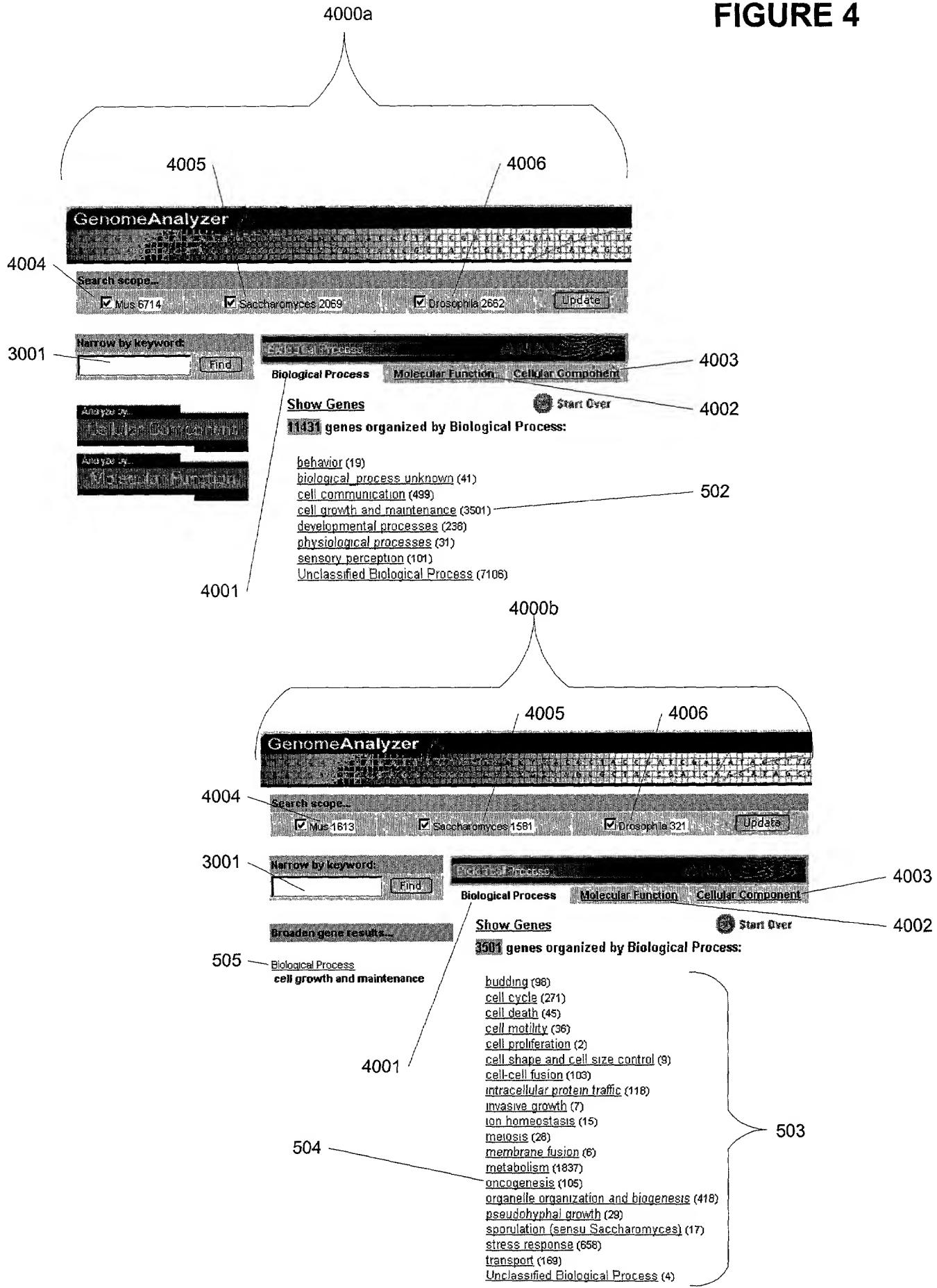
## FIGURE 2



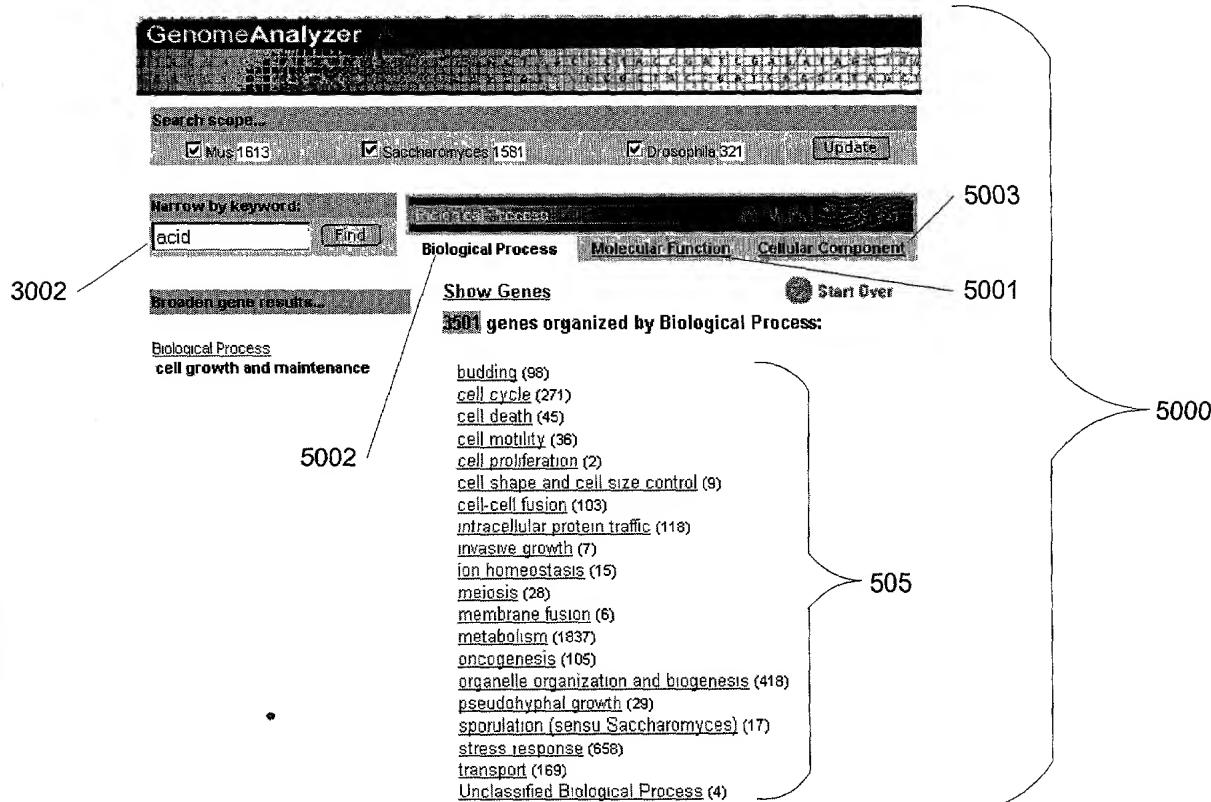
**FIGURE 3**



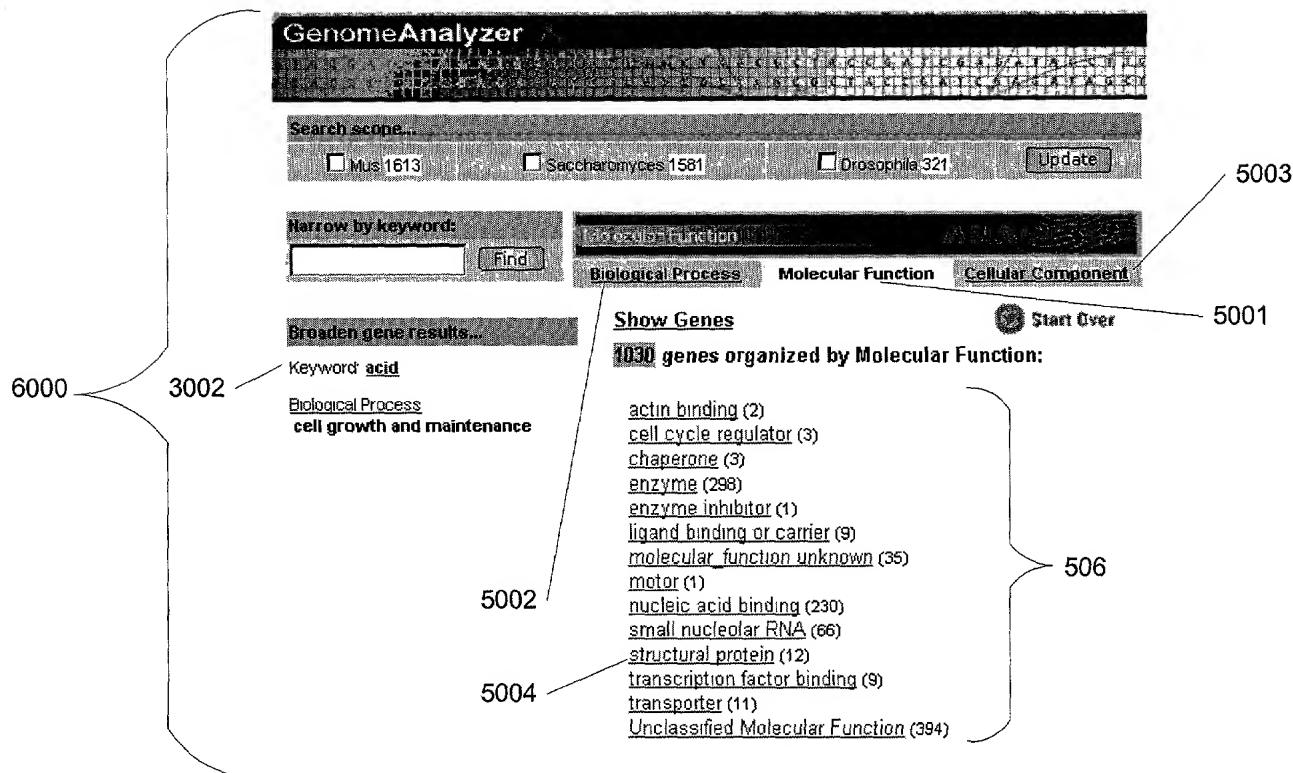
# FIGURE 4



## FIGURE 5

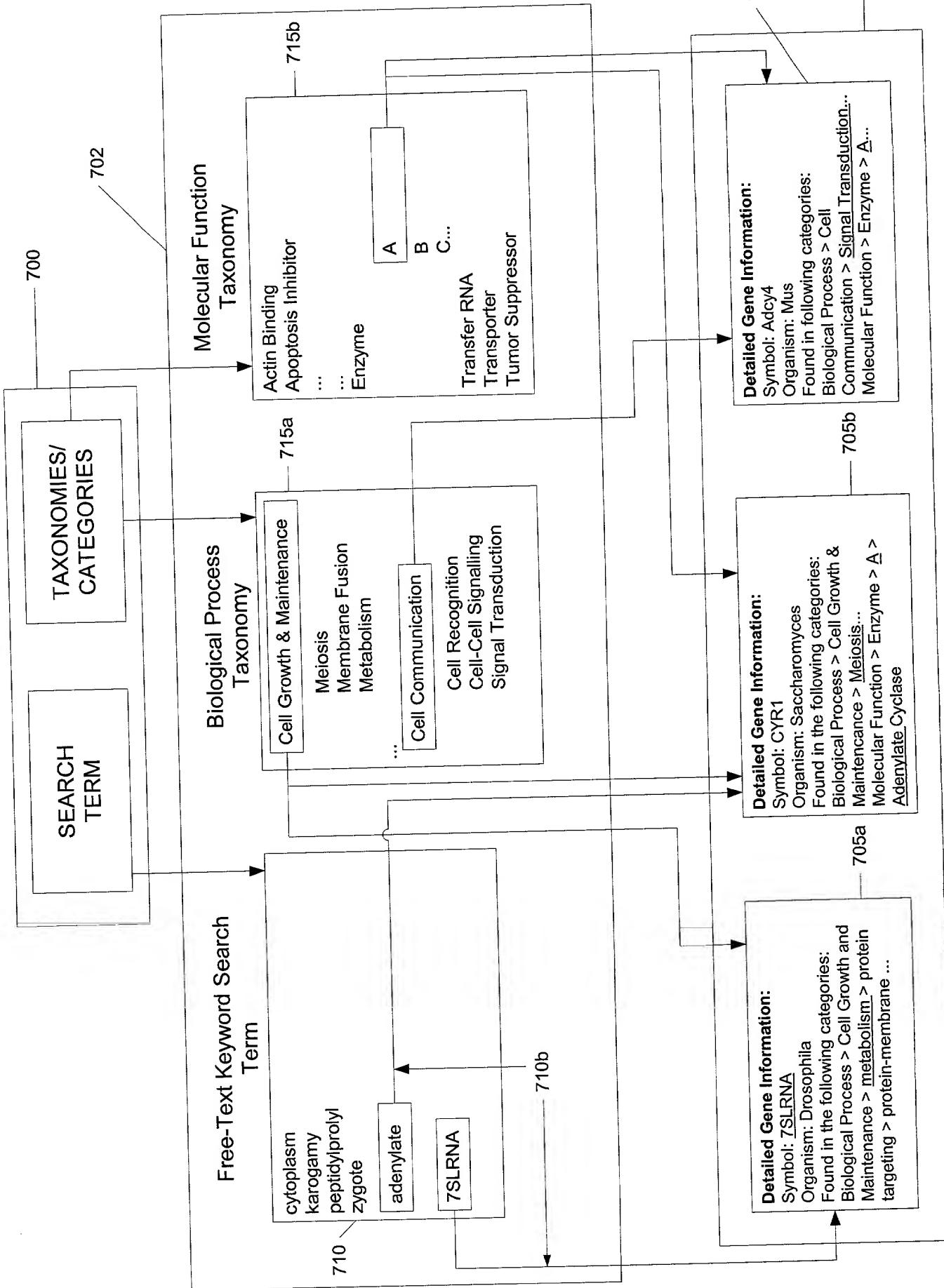


## FIGURE 6

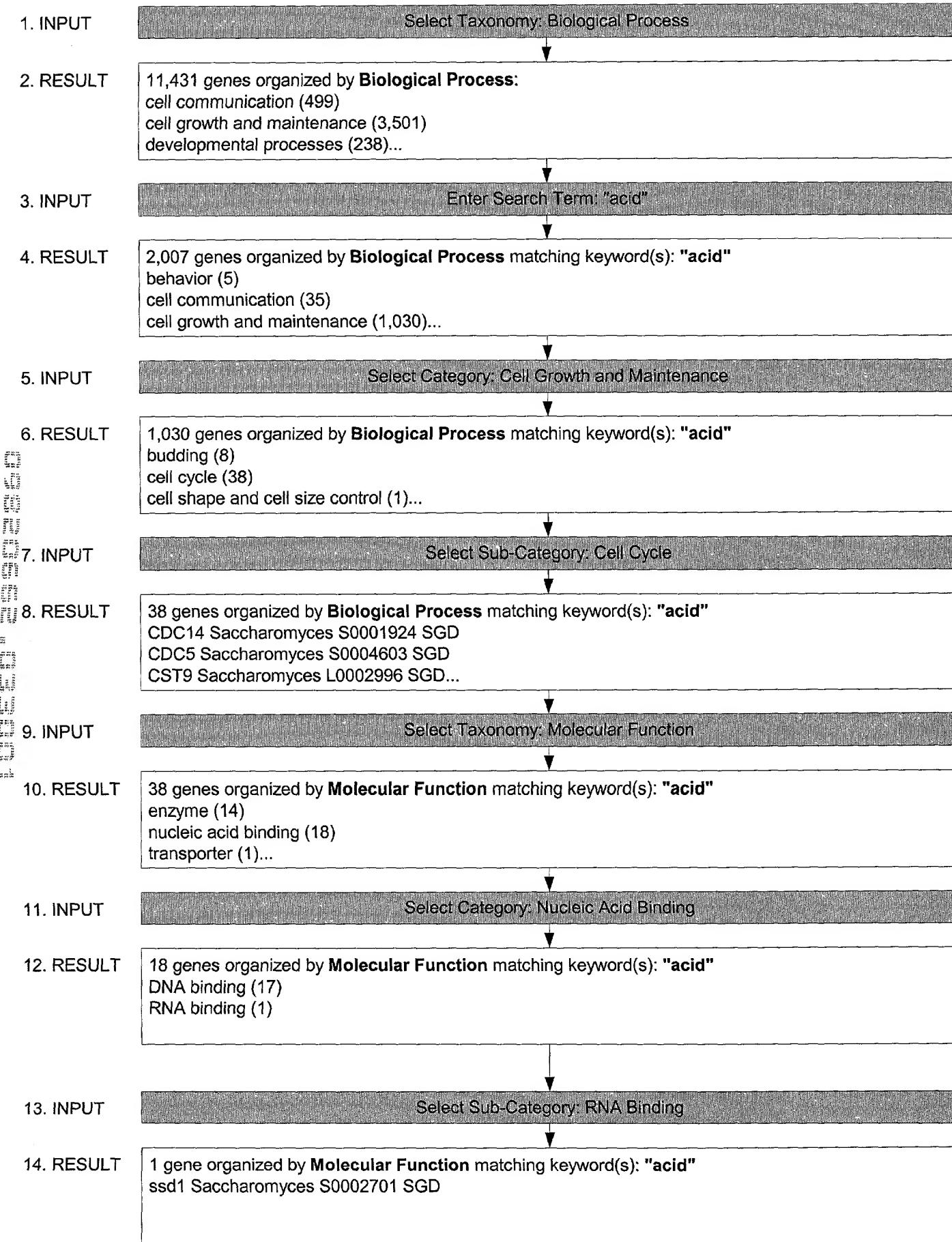


**FIGURE 7**

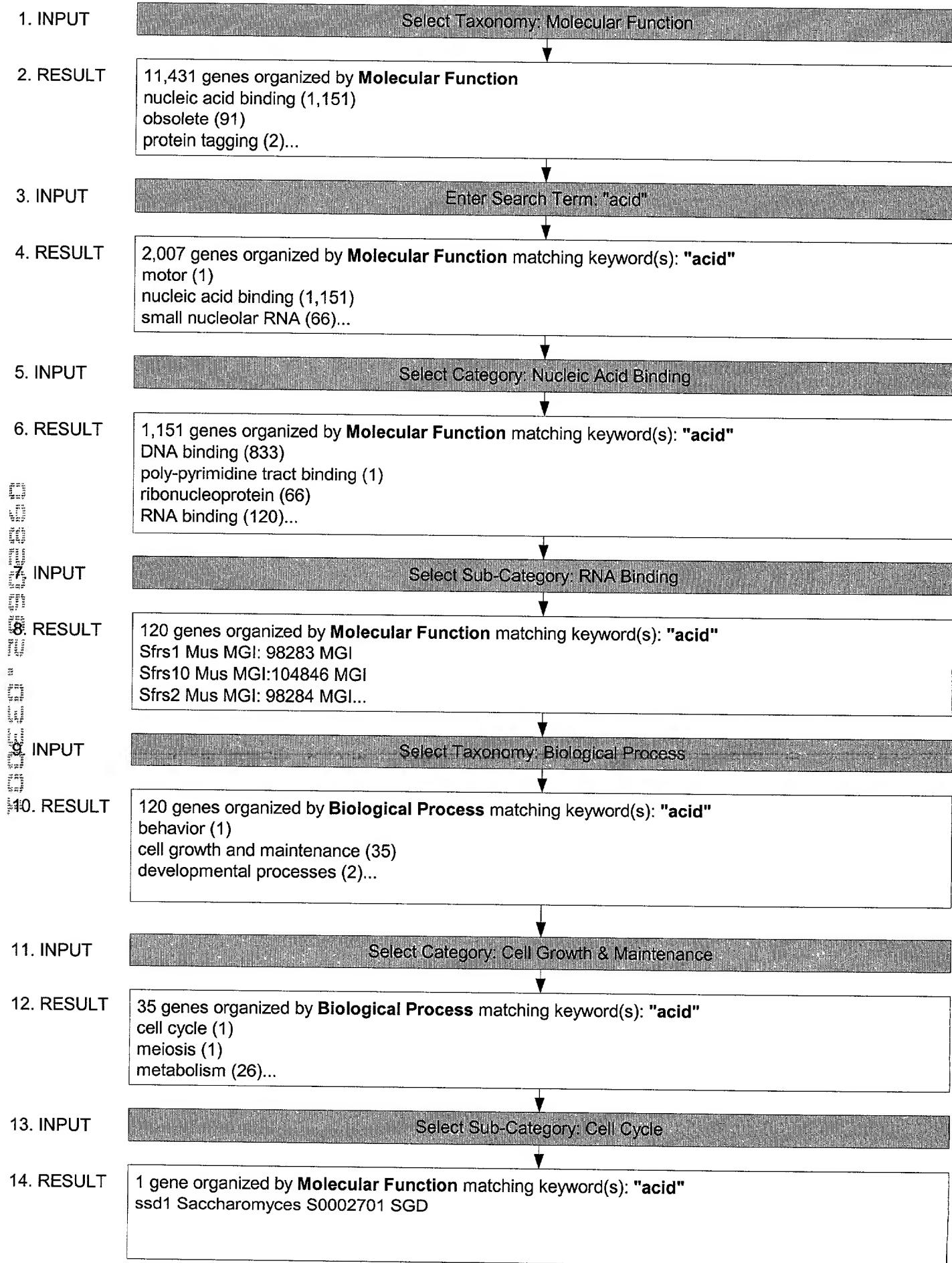
Query



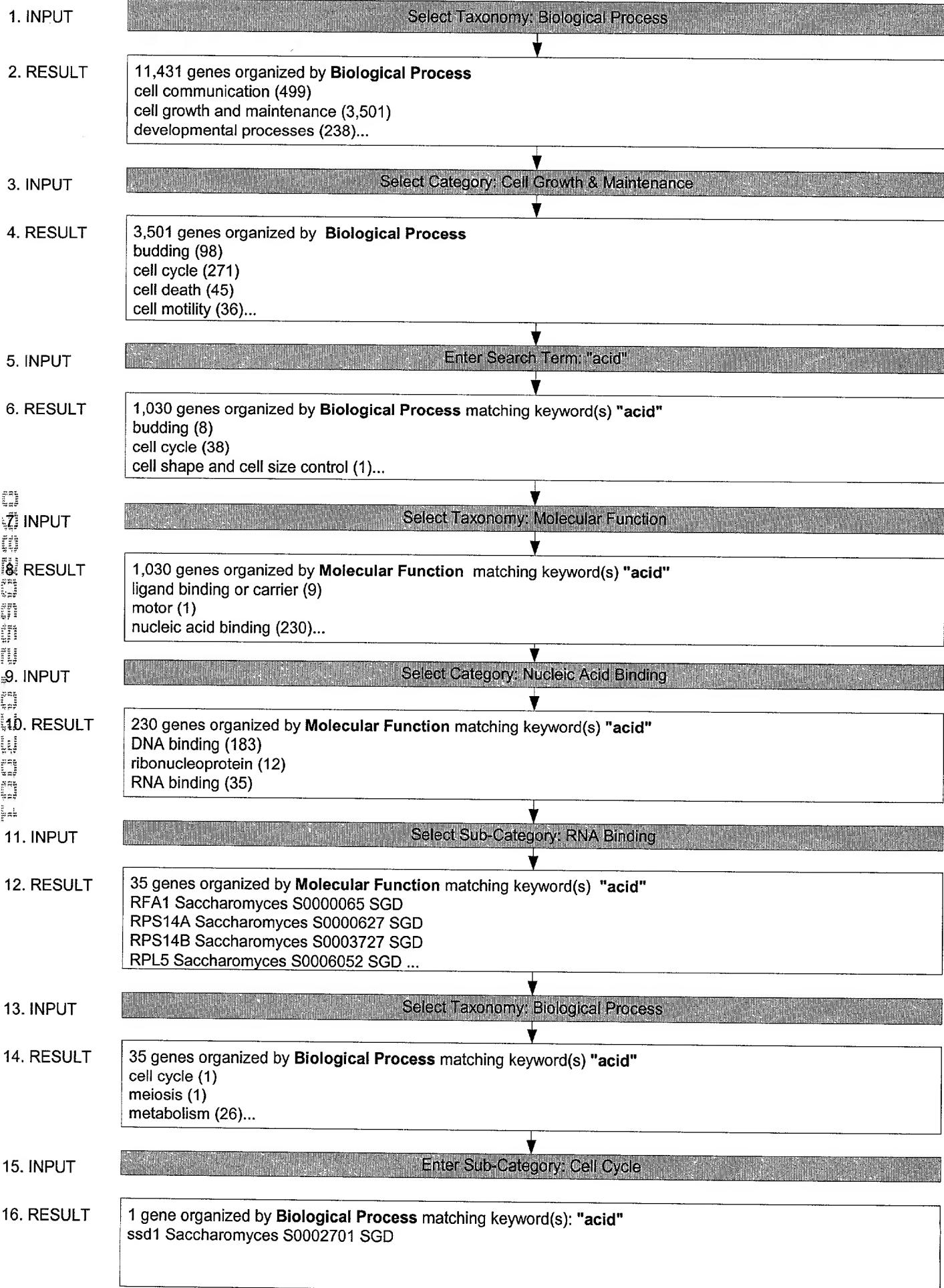
## FIGURE 8



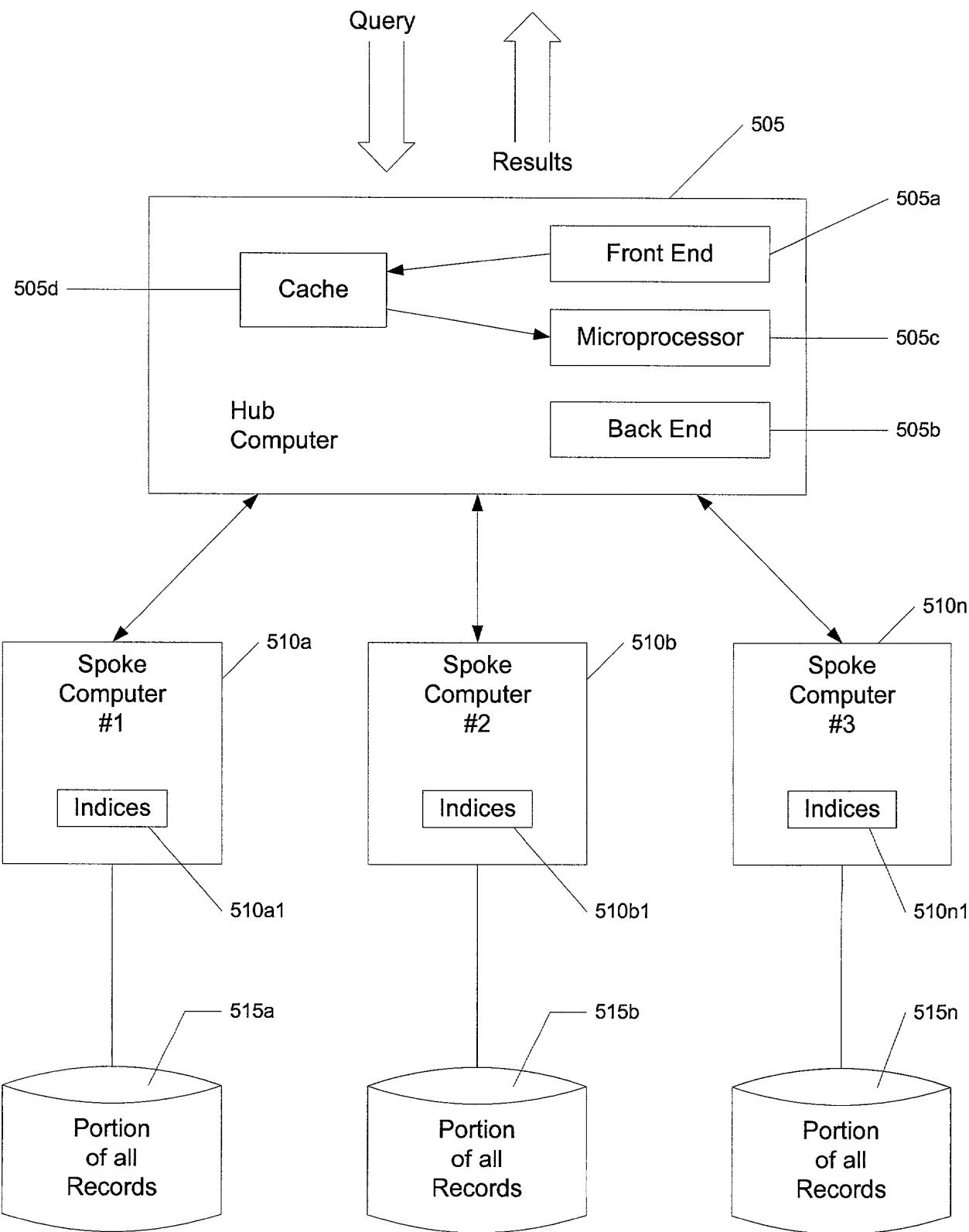
# FIGURE 9



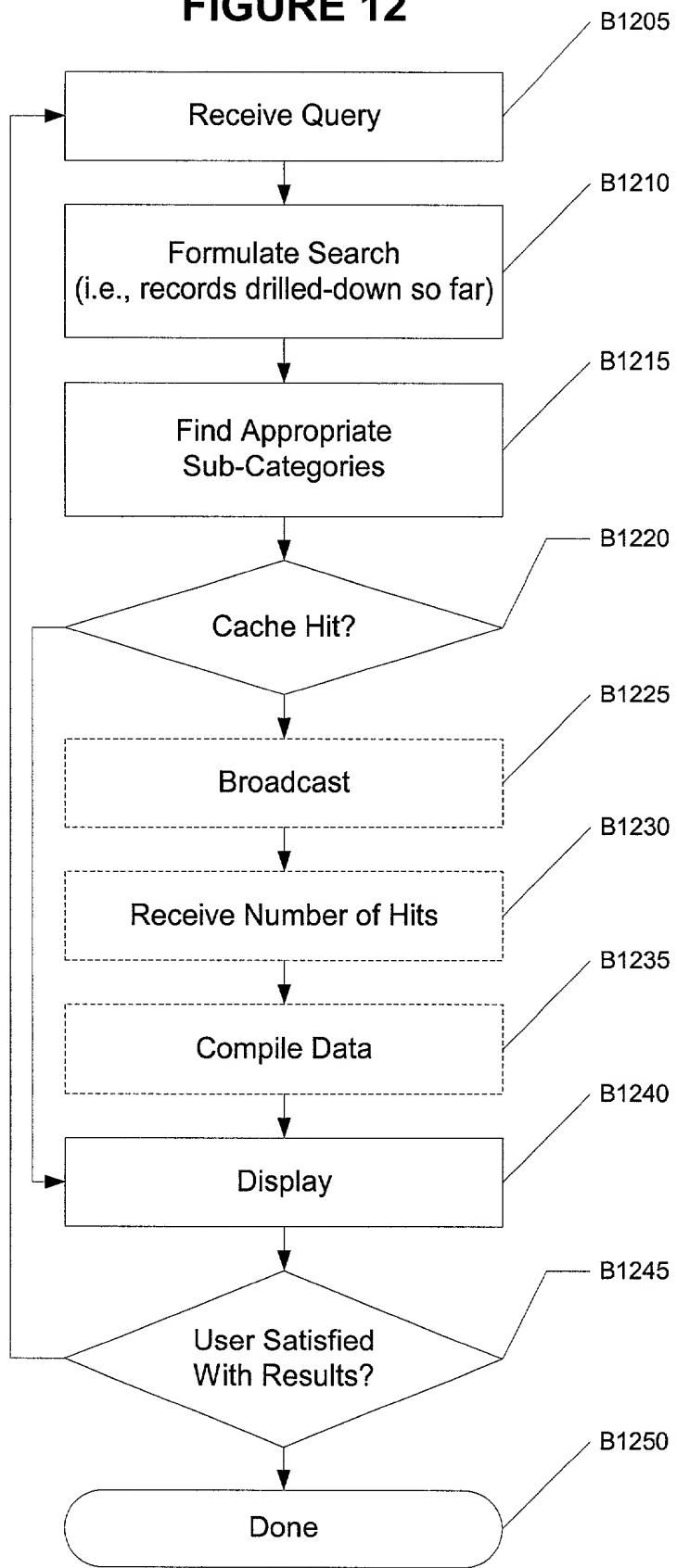
# FIGURE 10



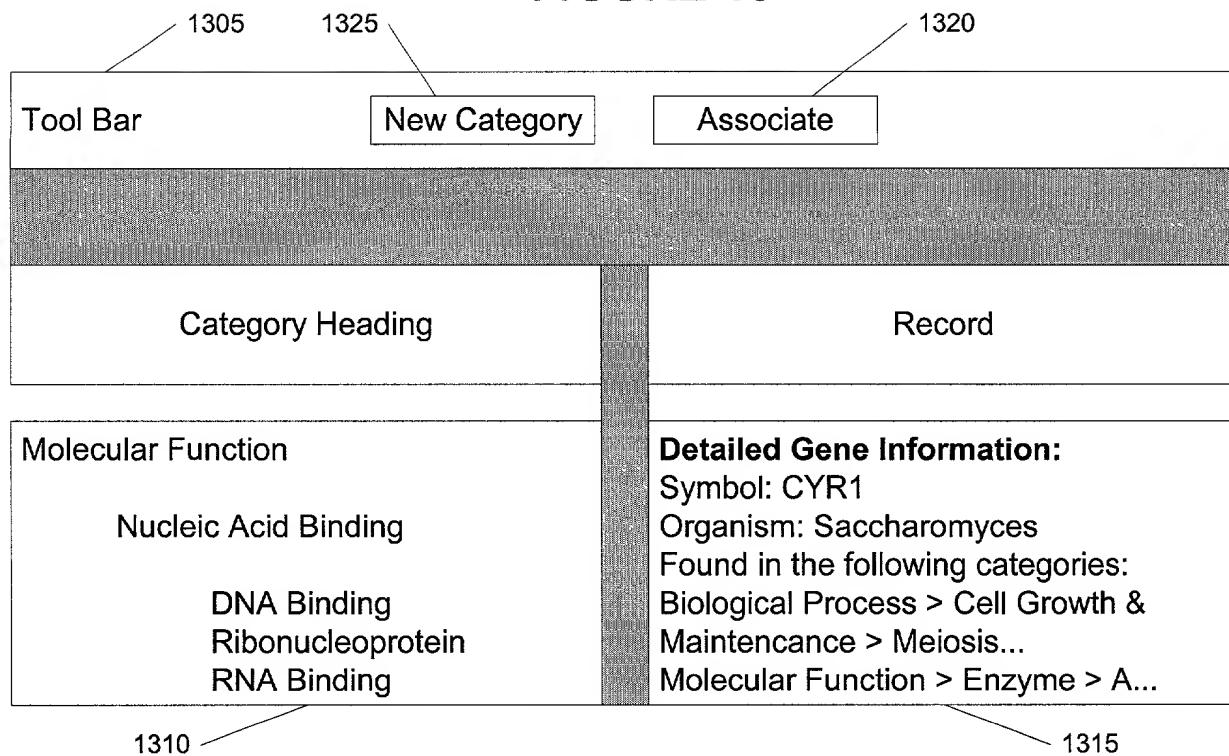
## FIGURE 11



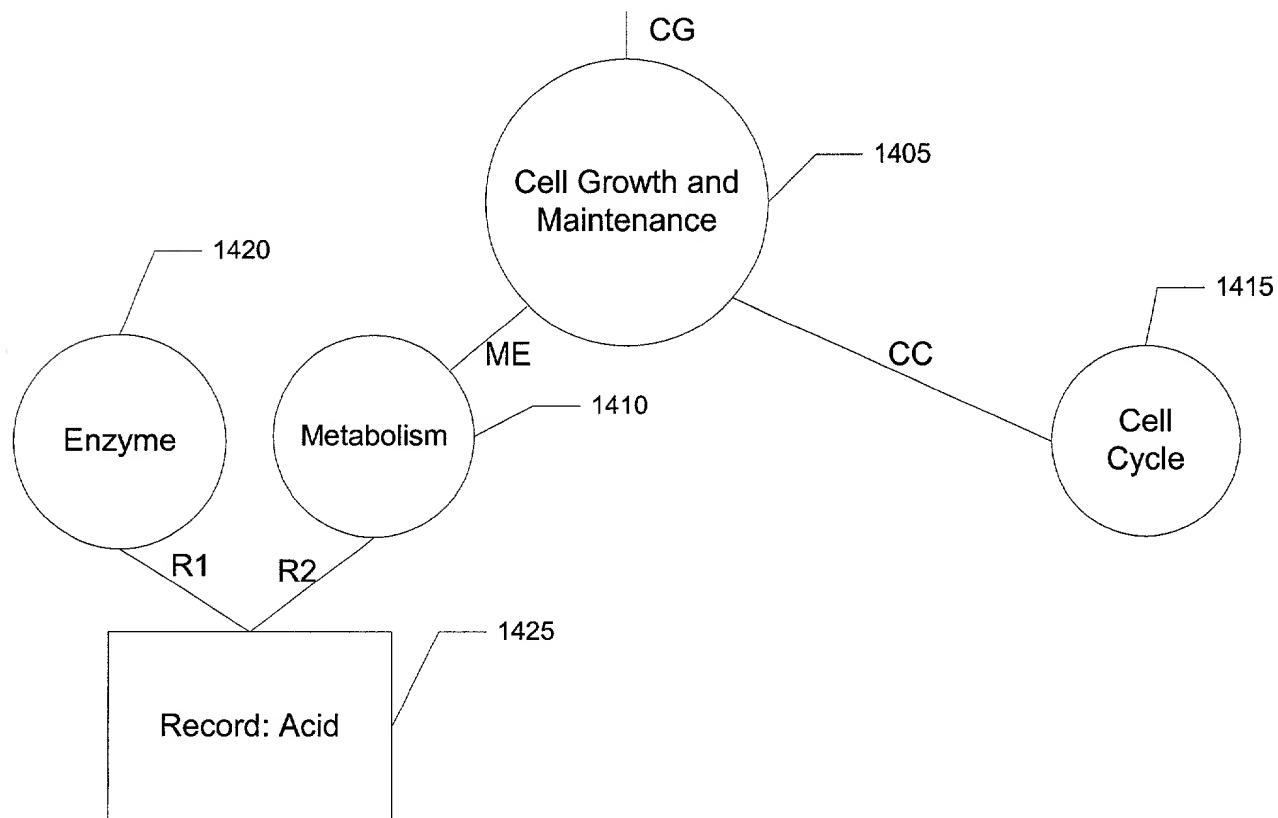
## FIGURE 12

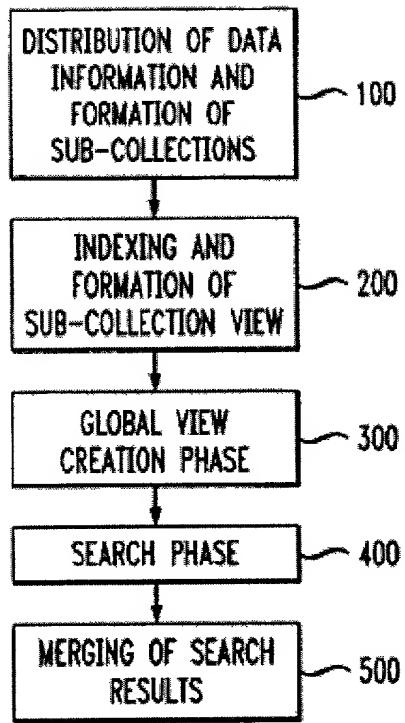


## FIGURE 13

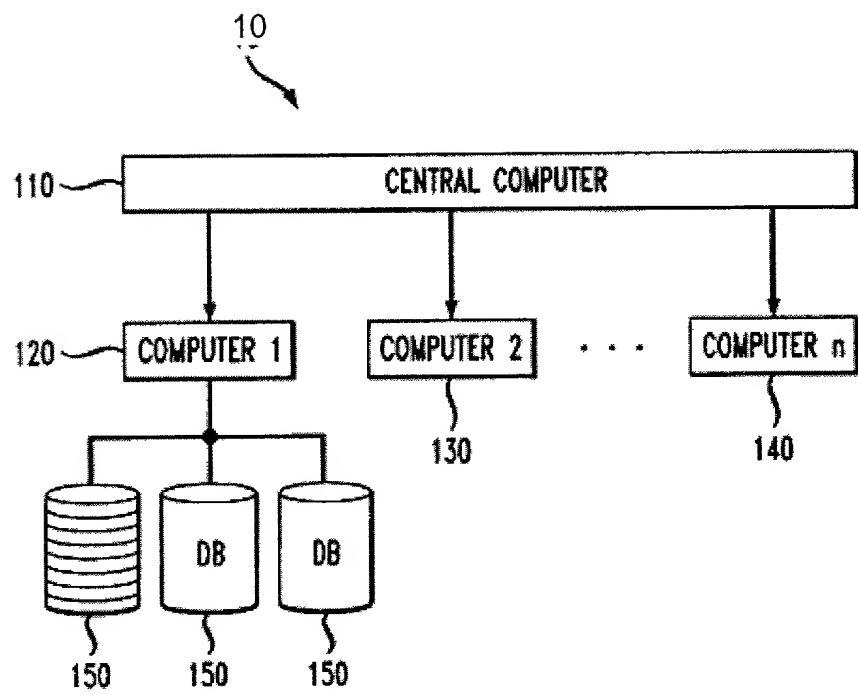


## FIGURE 14





**FIGURE 15**



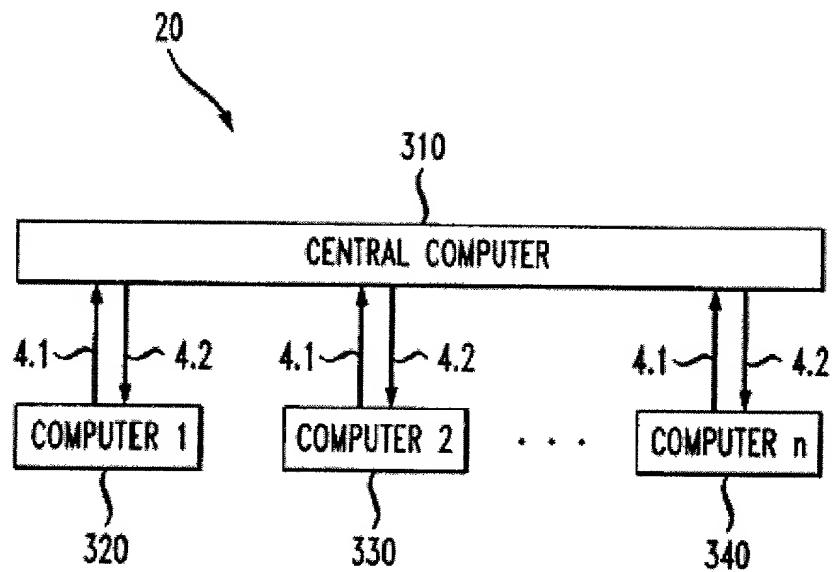
**FIGURE 16**

	210
WORD <sub>1</sub> → DOCUMENT <sub>1</sub> , WEIGHT <sub>1</sub> ; DOCUMENT <sub>2</sub> , WEIGHT <sub>2</sub> ; ...; DOCUMENT <sub>X</sub> , WEIGHT <sub>J</sub>	~ 220
WORD <sub>2</sub> → DOCUMENT <sub>1</sub> , WEIGHT <sub>3</sub> ; DOCUMENT <sub>2</sub> , WEIGHT <sub>4</sub> ; ...; DOCUMENT <sub>X</sub> , WEIGHT <sub>K</sub>	~ 230
.	
WORD <sub>n</sub> → DOCUMENT <sub>1</sub> , WEIGHT <sub>5</sub> ; DOCUMENT <sub>2</sub> , WEIGHT <sub>6</sub> ; ...; DOCUMENT <sub>X</sub> , WEIGHT <sub>L</sub>	~ 240

**FIGURE 17**

TOTAL NUMBER OF DOCUMENTS IN SUB-COLLECTION	
WORD <sub>1</sub>	NUMBER OF DOCUMENTS IN SUB-COLLECTION THAT CONTAIN WORD <sub>1</sub>
WORD <sub>2</sub>	NUMBER OF DOCUMENTS IN SUB-COLLECTION THAT CONTAIN WORD <sub>2</sub>
.	.
.	.
.	.
WORD <sub>n</sub>	NUMBER OF DOCUMENTS IN SUB-COLLECTION THAT CONTAIN WORD <sub>n</sub>

**FIGURE 18**



**FIGURE 19**

TOTAL NUMBER OF DOCUMENTS IN ALL OF THE SUB-COLLECTIONS	
WORD <sub>1</sub>	TOTAL NUMBER OF DOCUMENTS THAT CONTAIN WORD <sub>1</sub>
WORD <sub>2</sub>	TOTAL NUMBER OF DOCUMENTS THAT CONTAIN WORD <sub>2</sub>
.	.
.	.
.	.
WORD <sub>n</sub>	TOTAL NUMBER OF DOCUMENTS THAT CONTAIN WORD <sub>n</sub>

**FIGURE 20**